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Patent claims

5 1. A deflection chamber of a fresh air supply
system of a motor vehicle, which has an inlet port, an
outlet port and at least one drainage wall for the
collection and evacuation of water, the direction of
arrival of the water droplets being directed from the
10 inlet port toward the drainage wall, characterized in
that, in the free cross section between inlet port (2)
and drainage wall (4), trapping elements (5, 6, 9, 7,
8) for the evacuation of water are disposed in such a
way that their surfaces facing the inlet port are
15 aligned at an acute angle (α) to the direction of
arrival (A) and in that the trapping elements (5, 6, 9,
7, 8), from the perspective of the direction of
arrival, cover the drainage wall (4), at least in the
region disposed behind the inlet port (2) in the
20 direction of arrival (A).

2. The deflection chamber as claimed in patent
claim 1, characterized in that the inlet port, in the
mounted state, is disposed at a high level and the
25 outlet port is disposed in a side wall of the
deflection chamber, and in that the drainage wall(s)
essentially comprise(s) the wall region situated in the
deflection chamber opposite the inlet port and/or
disposed below it.

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3. The deflection chamber as claimed in patent
claim 1 or 2, characterized in that the trapping
elements are configured as lamellae (5; 6; 9).

35 4. The deflection chamber as claimed in patent
claim 3, characterized in that the lamellae (6) are
made bent or curved along the direction of arrival.

5. The deflection chamber as claimed in patent claim 1 or 2, characterized in that the trapping elements are configured as wedge profiles (7; 8).

5 6. The deflection chamber as claimed in patent claim 4, characterized in that two grilles (10 and 11), disposed one above the other in the mounted state, of approximately parallel-standing trapping elements (7, 8) are disposed offset in such a way that the upper grille 10 cover the drainage wall(s) (4.2) between the trapping elements of the lower grille (10).

7. The deflection chamber as claimed in one of patent claims 1-6, characterized in that the trapping elements (5, 6, 7, 8) are aligned essentially transversely to the direction of outflow (B).

8. The deflection chamber as claimed in one of patent claims 1-6, characterized in that the trapping elements (9), at least in their upper region, are aligned approximately parallel to the direction of outflow (B).

9. The deflection chamber as claimed in patent claim 8, characterized in that drainage ribs (12) for the evacuation of water are disposed respectively on both sides on the surfaces of the lamellae (9), along the edge which limits the respective lamella in the direction of the outlet port (2).